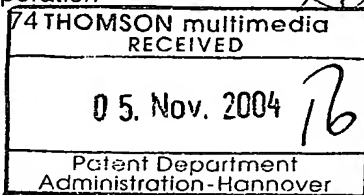


From the
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To:

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PCT

**NOTIFICATION OF TRANSMITTAL OF
THE INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

(PCT Rule 71.1)

Date of mailing
(day/month/year) 04.11.2004

Applicant's or agent's file reference
PD020106 ✓

IMPORTANT NOTIFICATION

International application No.
PCT/EP 03/12261

International filing date (day/month/year)
03.11.2003

Priority date (day/month/year)
15.11.2002

Applicant
THOMSON LICENSING S.A. et al.

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.

4. REMINDER

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

The applicant's attention is drawn to Article 33(5), which provides that the criteria of novelty, inventive step and industrial applicability described in Article 33(2) to (4) merely serve the purposes of international preliminary examination and that "any Contracting State may apply additional or different criteria for the purposes of deciding whether, in that State, the claimed inventions is patentable or not" (see also Article 27(5)). Such additional criteria may relate, for example, to exemptions from patentability, requirements for enabling disclosure, clarity and support for the claims.

Name and mailing address of the international
preliminary examining authority:



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INTERNATIONAL PRELIMINARY EXAMINATION REPORT
(PCT Article 36 and Rule 70)

Applicant's or agent's file reference PD020106		FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/EP 03/12261	International filing date (day/month/year) 03.11.2003	Priority date (day/month/year) 15.11.2002	
International Patent Classification (IPC) or both national classification and IPC HO4N5/445			
Applicant THOMSON LICENSING S.A. et al.			
<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 5 sheets, including this cover sheet.</p> <p><input checked="" type="checkbox"/> This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of 3 sheets.</p>			
<p>3. This report contains indications relating to the following items:</p> <p>I <input checked="" type="checkbox"/> Basis of the opinion</p> <p>II <input type="checkbox"/> Priority</p> <p>III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p>IV <input type="checkbox"/> Lack of unity of invention</p> <p>V <input checked="" type="checkbox"/> Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p>VI <input type="checkbox"/> Certain documents cited</p> <p>VII <input type="checkbox"/> Certain defects in the international application</p> <p>VIII <input type="checkbox"/> Certain observations on the international application</p>			
Date of submission of the demand 17.05.2004		Date of completion of this report 04.11.2004	
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465		Authorized Officer de Dieuleveult, A Telephone No. +49 89 2399-8946 	

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. PCT/EP 03/12261

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, Pages

1-10 as originally filed

Claims, Numbers

1-9 received on 23.10.2004 with letter of 22.10.2004

Drawings, Sheets

1/9-9/9 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
☐ the language of publication of the international application (under Rule 48.3(b)).
☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority in written form.
☐ furnished subsequently to this Authority in computer readable form.
☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
☐ the claims, Nos.:
☐ the drawings, sheets:

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

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5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-9
	No: Claims	
Inventive step (IS)	Yes: Claims	1-9
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-9
	No: Claims	

2. Citations and explanations

see separate sheet

V. Reasoned statement

1. Reference is made to the following document:

D1: US 2002/063681 A1 (CHEN MILTON ET AL) 30 May 2002

2. Claim 1:

D1 discloses a method for composition of subtitles for audio/video presentations (see "picture layer, layer for oral voice, first and second instrument" in paragraph [0017]), wherein data streams containing video, audio and subtitle information are transferred from a storage medium (see "database"), comprising the step of retrieving from said storage medium subtitle layer data, the subtitle layer data containing graphic subtitle elements (see "subtitle layer" in par. [0022]).

The claimed subject-matter thus differs from the disclosure of D1 in that the claimed method further comprises the steps of extracting from said retrieved subtitle layer data cropping information, and of enabling automatic cropping of parts of the subtitle elements to be displayed, wherein the cropped parts are defined by said cropping information.

D1 does not appear to offer any alternative to the displaying of the whole subtitle information (see Fig. 4A-4E).

Even if D1 mentions the possibility for the user to modify the size and position of an image object 256 (see par. [0027]), and although it is well known from numerous editing software (e.g. Microsoft Works' PictureIt!) to allow a cropping function on such an image layer as well, some manual input from a user is still required in the prior art whereas, in the present application, the cropping information is directly extracted from the subtitle layer data that has been pre-recorded in the storage medium.

The subject-matter of claim 1 is therefore considered to satisfy the conditions set out in Article 33 PCT.

3. Claims 5 and 9:

The same reasoning applies to these independent claims directed to the corresponding apparatus (claim 5) and optical storage medium (claim 9).

4. Claim 7:

The particular arrangement for the composition of subtitles as claimed herein is neither disclosed nor fairly suggested by the cited documents.

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/EP 03/12261

5. Claims 2-4, 6 and 8:

These claims are dependent claims and thus fulfill the requirements of the PCT as well.

6. Corrections should be made:

- in Fig. 5: "SVCA" should read "SCVA";
- in Fig. 8: the bidirectional arrow should link "AVSGL" with "SL" (see p. 8, ll. 27-30).

JG13 Rev 8 PCT/PTO 16 MAY 2005

New Claims

1. Method for composition of subtitles for audio/video presentations, wherein data streams containing video, audio and subtitle information are transferred from a storage medium, such as a disc, **characterized in**
 - retrieving from said storage medium subtitle layer data, the subtitle layer data containing graphic subtitle elements;
 - extracting from said retrieved subtitle layer data cropping information (RHC,RVC,RCH, RCW); and
 - enabling automatic cropping of parts of the subtitle elements to be displayed, wherein the cropped parts are defined by said cropping information.
2. Method according to claim 1, wherein the cropped parts of the subtitle elements are synchronized to the audio/video presentation through presentation time stamps.
3. Method according to claim 1 or 2, wherein the subtitle layer data comprise data for a first color look-up table to be used within a sub-region of said cropped parts of the subtitles, the sub-region being specified by parameters (SCHA,SCVA,SCH,SCW) included in said subtitle layer data, and further comprise data for a different second color look-up table to be used in the remainder of the subtitle layer.
4. Method according to any of the previous claims, wherein a user may interactively move, crop or highlight subtitles or modify the colors of subtitles.
5. Apparatus for composition of subtitles for audio/video

presentations, wherein data streams containing video, audio and subtitle information are transferred from a storage medium, **characterized in**

- means for retrieving from said storage medium subtitle layer data, wherein the subtitle layer data contain graphic subtitle elements;
- means for extracting from said retrieved subtitle layer data cropping information (RHC,RVC,RCH, RCW); and
- means for enabling automatic cropping of parts of the subtitle elements to be displayed, wherein the cropped parts are defined by said cropping information.

6. Apparatus according to the previous claim, further comprising means for synchronizing the cropped parts of the subtitles to the audio/video presentation through presentation time stamps.

7. Apparatus for composition of subtitles, the apparatus mixing and switching video and graphics data, the data being read from a storage medium or received from a network and comprising still picture data or MPEG video data, data for at least two layers of subtitles or animations, and optionally data for non-synchronized graphics, the apparatus comprising

- a mixer (MX) that may superimpose video data of a back layer, at least two middle layers and a front layer;
- a mixer and scaler (MXS) that may superimpose video data of a back layer, a middle layer and a front layer, the mixer and scaler (MXS) providing its output data to the mixer (MX);
- a video decoder (MVDec) and/or a still picture decoder (SPDec), wherein the output data of either the video decoder or the still picture decoder may be switched

- (s1) to the mixer and scaler (MXS);
- at least two simultaneously working decoders (AVSGDec1, AVSGDec2) for synchronized graphics or subtitles, wherein the output of each of the decoders may be switched (s2, s3) to either the mixer (MX) or the mixer and scaler (MXS), and wherein a decoder (AVSGDec1, AVSGDec2) may select a part (RHC, RVC, RCH, RCW) of its input data to be output for display;
 - a renderer for the non-synchronized graphics, providing data to the mixer (MX).
8. Apparatus according to any of the claims 5-7, further comprising a subtitle decoder (ST-DEC) that is capable of superseding default subtitle parameters (DD) with other subtitle parameters (SD) generated upon user action, for interactively modifying or highlighting subtitles.
9. Optical storage medium containing data for audio/video presentation and data for composition of subtitles for said audio/video presentation, wherein the data for composition of subtitles contain
- data representing graphic subtitle elements to be rendered in a subtitle layer; and
 - cropping information (RHC, RVC, RCH, RCW) defining parts of the graphic subtitle elements to be automatically cropped before displaying the subtitles.

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